ABSTRACT

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Title of Thesis: Development of GC metod for the determination of vitamine E acetate in nutritive supplements

A GC method was developed for the determination of content of vitamine E acetate in nutritive supplements. The method was optimised and validated.

The column Capillary GC, Equity Columns, Equity ^{TM} – 5 poly (5 % bifenyl / 95 % dimethylpolysiloxan); 0,32 mm ID x 30 m; 1,0 mm d_r was used for the analysis. Helium was used as a carrier. Split was 1 : 100. Flame-ionization detector was used for detection. Optimal conditions for analysis: temperature of column 340 °C, temperature of injection 340 °C, temperature of detector 320 °C, flow-rate 2 ml/min. Fenoxycarb was chosen as an internal standard.

The method was used for an analysis of vitamine E acetate in nutritive supplements Geladrink Forte pulverized drink – pineapple and Chondrotin MSM 2600. Determined concentration of vitamine E acetate was re-counted to the content of vitamine E declared by producer.